

Date: Thu, 17 Feb 94 01:12:36 PST  
From: Info-Hams Mailing List and Newsgroup <info-hams@ucsd.edu>  
Errors-To: Info-Hams-Errors@UCSD.Edu  
Reply-To: Info-Hams@UCSD.Edu  
Precedence: Bulk  
Subject: Info-Hams Digest V94 #164  
To: Info-Hams

Info-Hams Digest                      Thu, 17 Feb 94                      Volume 94 : Issue 164

Today's Topics:

                    call book typo... sorry  
          Copying High-Speed CW: Print or Script?  
                    DSPs are hot  
                    Guide to the Personal Rad  
          HAMBLASTER INCORRECT STATEMENTS  
                    Hamblaster update  
                    Help: QSL Printer  
                    Keyboards at testing sessions  
  MAJOR NEW HF RADIO PROPAGATION SOFTWARE ANNOUNCEMENT  
                    Nashvill --> Knoxville 2m?  
                    Nude amateur radio clubs

Send Replies or notes for publication to: <Info-Hams@UCSD.Edu>  
Send subscription requests to: <Info-Hams-REQUEST@UCSD.Edu>  
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Info-Hams Digest are available  
(by FTP only) from UCSD.Edu in directory "mailarchives/info-hams".

We trust that readers are intelligent enough to realize that all text  
herein consists of personal comments and does not represent the official  
policies or positions of any party. Your mileage may vary. So there.

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Date: 16 Feb 1994 04:14:59 GMT  
From: ucsnews!newshub.sdsu.edu!usc!howland.reston.ans.net!usenet.ins.cwru.edu!  
odin!trier@network.ucsd.edu  
Subject: call book typo... sorry  
To: info-hams@ucsd.edu

In article <1994Feb3.082750.23616@usl.edu>,  
Morrison Charles F <cfm1471@ucs.usl.edu> wrote:  
>>cs.buffalo.edu 2000                      or 128.205.32.2  
>>  
>>again, the word 'callsign' was not needed here. sorry for the trouble.





#  
# [] Gerson Rissin - Rio de Janeiro, RJ. - BRASIL  
#

-----  
Date: 14 Feb 94 14:43:21 GMT  
From: psinntp!psinntp!laidbak!tellab5!jwa@rutgers.rutgers.edu  
Subject: HAMBLASTER INCORRECT STATEMENTS  
To: info-hams@ucsd.edu

In article <N4HY.94Feb9140932@harder.ccr-p.ida.org> n4hy@harder.ccr-p.ida.org (Bob McGwier) writes:

>

I had some errors in my last post

I didn,t want to get into a "Point/Counterpoint" rebutal  
but I was convinced by others to do so.

JWA= Jack Albert  
RWM= Robert W. McGwier

-----  
RWM

Howdy:

In a recent spate of messages, we have been told of the capabilities of the hamblaster. It sounds rudimentary so far but I am sure that over time the capabilities (new software development) will proceed and its capabilities will be enhanced and it will make a very interesting tool for amateur radio communications, experimentation, and learning DSP. There will be alternatives as you will now be told.

JWA

For future expansion, the Hamblaster has an expansion connector. Several add-ons will include, a better A/D-D/A, Packet switch, real time tuning scope display driver and a microprocessor.

RWM

In other messages, John Alberts has told us of the lack of capabilities of the Sound Blaster 16 with ASP. He is WRONG.

JWA

Not really, because I own one, I was refering to the Soundblaster Pro. Any referances to the ASP version was based on information from the "Ultimate Soundblaster Book" that I purchased from a local book store. I was unaware and the book didn't mention it's programming capabilities. I believe my actual words where "Im not shure but" .

RWM

I received my Sound Blaster developers kit via UPS yesterday at last. It is easy to see how John could have made the mistake he made. The manuals received in the kit describe two distinct pieces of processing hardware. One is called the DSP and the other is the ASP.

The DSP has all the limitations mentioned by John in his statements concerning the capabilities of the Sound Blaster card (or lack thereof). It is a proprietary gate array surrounding masks from other chip developers to do stuff like DMA blocks of samples in and out, to convert PCM to u-LAW, 2 or 4 bit ADPCM, CVSD, etc. It directs the flow of MIDI commands, etc. It is a pretty neat thing in and of itself but it is NOT what we want. We want a full blown DSP chip, with a modified Harvard architecture and at least 16 by 16 bit -> 32 multiply, accumulate, read new coefficient and data in one instruction time. THE ASP is a real DSP chip and has all this. It is 512 words of off chip program memory, 512 words of off chip data ram, 192 words of X RAM on chip, 128 words of Y ram on chip.

JWA

The Hamblaster comes with 32K of program/data memory. It will be expandable to 32k of program and 32k of data memory with a total of 64k words. More than you'll ever need!

Our packet modem software is 3K. It just won't fit in the Soundblaster ASP 16.

RWM

X ram is program and sample data, Y RAM would be used for filter coefficients. THIS IS A FULL BLOWN DSP CHIP. It does NOT have the limitations John has told us the hamblaster overcomes.

Indeed, on the A/D, D/A front, it is quite clear that the under

\$300 SB16-ASP is quite a bit MORE CAPABLE than hamblaster.

JWA

New information places the Hamblaster at about \$275.00

RWM

It has two channels (16 bits each), D/A, and A/D. The sample rate is completely controllable by uploading a divisor to the control register. The lowest available rate is 5 KHz and the highest is 44.1 KHz. The processor runs at 12 MIPS so filters would execute at around 25 MIPS. This is because it has the typical DSP feature of multiply two numbers, read the next two, and accumulate the last result while shifting the pointers in two instruction times.

JWA

That's great for HiFi work but for Ham use you only need an 8kHz sample rate and an 8 bit D/A-A/D. If you consider pipelining the C25 also about runs 25 MIPS.

RWM

That is plenty fast. I will be able to do dual channel modems for this card. Since the thing does not also have a UART, or SIO, we will have to the HDLC and UART functions on the chip when required. Other DSP developers have done this all on chip (Finland DSP development group on the Motorola DSP56001). We will be able to do a lot.

John should be more careful when he makes flat statements about commercially available products. If he were a 'real competitor' of Creative Labs, he could get into a bit of a hassle.

JWA

There's no way that a product made for Ham Radio will compete with a product that will sell in the millions. In the Ham market there just aren't enough sales to generate a reasonable profit! You'll never get rich selling to Hams.

RWM

I told John in a reply to his mail that I doubted the accuracy of his statements on the Sound Blaster16 with ASP. I was correct.

JWA

Not really. Because of the proprietary nature,  
I can't disclose the full picture. When it's  
released, A complete package update will be available.

RWM

The Sound Blaster 16 with ASP is available from many  
places for under \$300. The developers kit is \$99, available only  
from Creative Labs.

JWA

I think the Hamblaster's price will be competitive!  
They will offer help to third party programmers.

RWM

I will be writing programs for the ASP and giving them away on your  
favorite ftp sites and through the ARRL download request service.  
These programs will be the basis of articles for QEX describing the  
algorithms and the operation of the sound blaster card in amateur  
radio applications. Phil Karn has devised a new link layer for  
packet, with FEC, etc. and I will be providing modems that use the  
ASP. I believe I can provide what the latest hamblaster announcements  
state and more in short order after I get the assembler for the  
ASP. I will do this as quickly as possible. I am a bit miffed that I  
stopped developing the Windows and DOS front ends and display stuff for  
the SB16 ASP after John's note because I thought the SB16 was too  
limited. Now it is full steam ahead.

JWA

Good Luck!

Programs for the Hamblaster will also be available on public  
domain disk or BBS's.

---

Jack Albert WA9FVP	Fellow Radio Hacker
Tele (708) 378-6201	
Tellabs Operations, Inc.	FAX (708) 378-6721
1000 Remington Blvd.	jwa@tellabs.com
Bolingbrook, IL 60440	

"I'm a half breed"

"I can only breed through on side of my nose!"

Eddie Kantor

-----  
Date: Tue, 15 Feb 1994 21:37:52 GMT  
From: catfish!cscsun!dtiller@uunet.uu.net  
Subject: Hamblaster update  
To: info-hams@ucsd.edu

John W. Albert (jwa@tellabs.com) wrote:  
: The Hamblaster Update

: Over the past several months I posted updates about a  
: DSP "The Hamblaster" that Will Torggrim (N9PEA) and myself  
: are developing.  
:  
: Several weeks ago I mentioned that the projected cost for  
: the board would be about \$350.00. It was just a  
: "guessestimate". It looks like it will be more in the \$275.00  
: range and could be as low as \$250.00. This may still sound  
: high compared to the Soundblaster or other sound cards, but  
: you have to remember that it's made exclusivly for Ham Radio  
: and it won't have the volume (sales) of other sound cards.

Is it just me, or is anyone else wondering why we're being continually  
bombarded with a blatantly commercial posting? I'm glad they've taken  
the initiative to make a new piece of hardware for hams, but I don't think  
this is the proper forum for their continous ads disguised as status  
reports.

--  
David Tiller | Network Administrator | Voice: (804) 752-7373 |  
dtiller@rmc.edu | Randolph-Macon College | Fax: (804) 752-7231 |  
n2kau@wa4ong.va.usa.na | P.O. Box 5005 | ICBM: 37d 42' 43.75" N |  
+++Arch-Conservative+++ | Ashland, Va 23005 | 77d 31' 32.19" W |

-----  
Date: 17 Feb 1994 07:06:03 GMT  
From: library.ucla.edu!europa.eng.gtefsd.com!howland.reston.ans.net!wupost!  
crcnis1.unl.edu!unlinfo.unl.edu!mcduffie@network.ucsd.edu  
Subject: Help: QSL Printer  
To: info-hams@ucsd.edu

This may seem like a strange request, but here goes...



Several years ago, I stumbled onto a specific QSL design that I liked very much. It was a card I received from someone else. The card had no markings from the printer, so I called the sender and asked for the information. Luckily, he still had it. It's now 13 years later, I've reordered from them once, moved once, and yes, lost the address.

I would like to describe the card and see if anyone recognizes the design. It is a thick card stock, flat-not shiney, is yellow at the top, gradually fading/transforming to redish-orange on the bottom. The printer was in PA (I think), and possibly had a name resembling RAU.

If anyone can supply me with the printer's name/address/phone, I would really appreciate it. I'd like to order some new cards from him as soon as possible.

Thank you for any help you might be able to provide.

73, Gary

-----  
Date: 16 Feb 94 17:04:14 GMT  
From: nprdc!ihnp4.ucsd.edu!sdd.hp.com!sgiblab!swrinde!cs.utexas.edu!math.ohio-state.edu!magnus.acs.ohio-state.edu!csn!server!stortek.com!  
patrick\_tatro@network.ucsd.edu  
Subject: Keyboards at testing sessions  
To: info-hams@ucsd.edu

When practicing for my code test I use the Morse Academy software on my computer. I'm finding my keyboard code speed is now 14wpm but my paper code speed is still at about 10 to 11wpm.

Would the VEC's kick me out if I brought a laptop to a code test session or should I wait until my paper speed catches up to my keyboard speed?

Opinions requested.

73's  
Patrick Tatro    NOWCG

-----  
Date: Mon, 14 Feb 1994 14:22:32 MST  
From: sgiblab!swrinde!cs.utexas.edu!math.ohio-state.edu!cyber2.cyberstore.ca!  
nnnp.cs.ubc.ca!alberta!ve6mgs!usenet@ames.arpa  
Subject: MAJOR NEW HF RADIO PROPAGATION SOFTWARE ANNOUNCEMENT  
To: info-hams@ucsd.edu

bid: \$STBL4045A  
NEW HF PROPAGATION SOFTWARE  
PACKET RADIO REPORT  
SOLAR TERRESTRIAL DISPATCH  
(PACKET: VE6MGS@VE6MC.#EDM.AB.CAN.NOAM)  
(INTERNET: COLER@SOLAR.STANFORD.EDU)

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Ionospheric Support Branch

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ON THE EARTH.

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- \* Simultaneously observe changes in the electron density as the signals are traced and refracted from one point to another.
- \* Examine the effects of signal convergence and divergence caused by ionospheric refraction.
- \* Study the behavior of signals as they penetrate into the various ionospheric layers (D, E, sporadic-E, F1, and F2 layers are all supported as well as TOP-SIDE ionospheric profiles up to 1000 km).
- \* Estimate effects of solar flares (minor or major) on the ionosphere and signals traversing the daylight sides of the ionosphere.
- \* Estimate the quality of any signal transmitted between any two points, under almost any set of circumstances. Quality figures are derived through the use of models that estimate the effects of: Geomagnetic Activity, SWFs, Sporadic-E, the Equatorial Anomaly, Regular Non-Deviative Absorption, the Winter Anomaly, Polar Cap Absorption, Deviative Auroral Absorption, etc.
- \* Determine circumstances which may result in very good, good, fair, poor, very poor, or even radio blackout conditions for any given path and for any given geophysical event.
- \* Determine accurate, rigorously ray-traced Maximum Usable Frequencies for practically any path.
- \* PRODUCE EXCEPTIONALLY DET
  - Determine exactly where your transmissions can be received on the Earth and the relative strength or quality of the received signals.
- \* PRODUCE IN-DEPTH COMPLEX GLOBAL MAPS OF IONOSPHERIC CHARACTERISTICS
  - These maps are similar to weather maps used by meteorologists and provide a wealth of information regarding the state of the ionosphere at any given date or time.
- \* Compute global maps of maximum usable frequencies for any time of day.
- \* Display global maps of ionospheric M-factors for 3000 km distances.
- \* Generate global maps of critical E or F2 layer frequencies.
- \* Display maps of solar zenith angles (elevation of the Sun).
- \* Generate global maps showing the maximum height of the F2 layer electron density.
- \* Produce unique transverse CROSS-SECTIONS of the ionosphere for any given path.
- \* Generate maps showing the geomagnetic DIP or inclination angles throughout the world.
- \* Display maps of the Total Field Intensity of the geomagnetic field.
- \* Also produce maps of Magnetic Latitude or Modified DIP angles.
- \* MIX AND MAT

#### SYSTEM REQUIREMENTS:

- IBM or compatible computer system (386 or better recommended).

- Math Coprocessor recommended, although not required.
- MSDOS 3.3 or higher.
- VGA graphics capabilities required. All graphics are VGA quality.
- 512 to 640 K of free memory.

FOR PRICING INFORMATION, CALL THE RECORDED MESSAGE (APPROXIMATELY 2 MINUTES)  
BY DIALING: 403 756-2386. A SPECIAL LIMITED TIME INT  
AVAILABLE \*ONLY\* THROUGH 31 MARCH 1994.

\*\* END OF PACKET BULLETIN \*\*

-----  
Date: Sat, 12 Feb 1994 23:04:33 GMT  
From: hearst.acc.Virginia.EDU!murdoch!faraday.clas.Virginia.EDU!wlp2y@uunet.uu.net  
Subject: Nashvill --> Knoxville 2m?  
To: info-hams@ucsd.edu

Howdy. Here's a question for anyone who lives in central or east Tennessee. Are there any 2m repeater links between Nashville and Knoxville, TN? Or any strategically placed repeaters (with good reach) between them that would allow a conversation?

How much power would be required for the second of the above two possibilities?

Will Phillips  
KE4ALY  
leroy@virginia.edu  
--

\*\*\* \*  
\*\*\* \* \* Wm. L. Phillips

-----  
Date: 14 Feb 94 13:42:33 GMT  
From: psinnntp!psinnntp!laidbak!tellab5!jwa@rutgers.rutgers.edu  
Subject: Nude amateur radio clubs  
To: info-hams@ucsd.edu

In article <1994Feb10.171218.7423@dtint.dtint.com> Allen Wallace  
<allen@dtint.dtint.com> writes:  
>In article <gdavis.760825204@griffin> Gary Davis, gdavis@griffin.uvm.edu  
>writes:

>> I heard a strange story on the CBC last evening. The report was on  
>>the increasing interest in nudism in the Winter months. To promote  
>>this festive and relaxing activity additional interests where specified.  
>>  
>>There is, according to the CBC, a nudist amateur radio club.  
>>  
>>I am wondering where, how many members? Anybody know anything about this?  
>

I wonder if nudest Hams use "rubber ducks"?

---

Jack Albert WA9FVP	Fellow Radio Hacker
Tele (708) 378-6201	
Tellabs Operations, Inc.	FAX (708) 378-6721
1000 Remington Blvd.	jwa@tellabs.com
Bolingbrook, IL 60440	

"I'm a half breed"

"I can only breed through on side of my nose!"

Eddie Kantor

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Date: 16 Feb 94 17:38:21 GMT  
From: news.tek.com!cascade.ens.tek.com!not-for-mail@uunet.uu.net  
To: info-hams@ucsd.edu

References <9402152045.AA03433@rodgers.rain.com>, <CLAFwp.J8C@cup.hp.com>,  
<2jrovm\$qss@reznor.larc.nasa.gov>texas.e  
Subject : Re: Nude QSL cards

>  
>him a non-nude QSL. If you're doing serious DX and you don't have time  
>to inform anyone of this, you ought to either slow down and do some  
>ragchewing or send a non-nude one out by default. Sheesh. This is a  
>non-issue that isn't worth debating here.  
>--scott

Do you suppose this might be away of increasing percentage of QSL  
returns? I suppose if all else fails, you might try it!  
(smiley)

Terry, KI7M

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Date: Wed, 16 Feb 1994 06:50:19 GMT  
From: agate!howland.reston.ans.net!usc!crash!beacons!kevin@network.ucsd.edu  
To: info-hams@ucsd.edu

References <1994Feb11.001239.2842@ke4zv.atl.ga.us>, <39@swan.ukc.ac.uk>,  
<1994Feb13.144554.14280@ke4zv.atl.ga.us>  
Subject : Re: 40 meter QRP (cw or ssb)

In article <1994Feb13.144554.14280@ke4zv.atl.ga.us> gary@ke4zv.atl.ga.us (Gary Coffman) writes:

>  
>OK, Alan, I understand what you're saying. My mental "FIFO", however,  
>is 3 characters or less deep. And that doesn't matter whether the  
>characters are input via aural Morse, visual flash cards, or spoken  
>phonetics. Once the depth exceeds 3, the oldest character is gone off  
>the stack. Attention span deficit, poor short term pattern memory,  
>or something.

The depth of my "mental FIFO" seems to be related more to time than to the number of state changes. That is, the faster the CW, the further behind I can recollect, or "play back", in my head. I can notice improvements in this ability after merely finding some 35 wpm folks on 40 meters and listening to them while I do other things. It is your subconscious mind which must keep the FIFO full, while your conscious mind pieces the words together.

Boy I hope the folks in sci.cognitive or whatever don't read this thread! ObDisclaimer: This is my own personal observation about what my own brain seems to do.

>...my natural text reading speed has been around 1000 WPM since first  
>grade. Slow is just no go for me, my mind races so far ahead considering  
>contextual pathways that I lose the thread of meaning if the input is  
>less than about 120 WPM.

Well Gary, it sounds like SHSM is the answer for you ;-)

(Super High Speed Morse for those who didn't guess it)

Kevin Sanders, KN6FQ  
kevin@beacons.cts.com

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| o o \_/ o o |  
| o o @ o o |  
|-----|
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End of Info-Hams Digest V94 #164

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